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An
Inaugural Dissertation
upon
Hepatitis

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of
Doctor of Medicine

by
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of
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The liver being one of the most important organs in the animal system, the functions it performs in the economy of life, together with the variety and delicacy of its structure renders it on many occasions the seat of dangerous and extensive disease.

This organ like most parts of the animal structure is liable to inflammation under two forms, the acute and chronic. It is to the former that I shall confine my remarks.

Symptoms - Acute hepatitis is ushered in with the ordinary phenomena of pyrexia as chillness, or rigors, succeeded by flushes of heat, fever and an increased activity of circulation. There is also pain in the right hypochondriac region either obtuse, or acute and lancinating, with a sense of weight or fulness, and an increase of the pain on pressure. The pain generally extends from the region of the liver to the right

shoulder-blade, and is sometimes felt more acutely there than in the diseased viscus itself. All the pain and uneasiness is sometimes felt, in the opposite side, owing we are taught, to the left lobe of the liver being affected.
It takes place more frequently in women than in men.
The lungs sometimes become affected, as is indicated by a short dry cough and difficulty of breathing.
The alimentary canal becomes very easily implicated, which is manifested by nausea and sickness, with vomiting of bilious matter.
The bowels are generally torpid and inactive, and the alvine evacuations are small in quantity, and clay coloured, showing a deficiency of biliary secretion.
Commonly from the commencement of this complaint the fever is high, with a dry skin,

foul tongue, headach, great thirst, watchfulness, and occasionly delirium. The eyes and skin are of a yellow tinge; the urine deposits a copious lateritious sediment, is of a saffron colour and small in quantity.

The liver now becomes swollen and tender, so that the patient cannot lie easy on either side, but he suffers less pain and uneasiness when he lies on the side affected. These are the ordinary features of the disease as they appear in this county, often modified, however, by the occurrence of irregular and anomalous symptoms. Between the tropics, it is more rapid in its course, running on to suppuration without any premonition, or without the usual symptoms denoting such a termination. The disease in this case is principally congestive, with obscure inflammation; and is ushered in, in the shape of

cholera morbus or bilious discharges downwards. Cases sometimes occur in which there is, no pain or uneasiness in the affected part, no sallowness of the skin, and little or no disturbance in the vascular system. At other times it puts on the form of pulmonic inflammation, or it expands itself upon the head inducing agonizing pain, or on the kidneys, or umbilicus, or even on the calves of the legs, amounting almost to paralysis, Cullen and other writers explain these differences on the supposition that different portions of the liver is affected.

It is said when great difficulty of breathing and cough accompany the pain in the liver, that these symptoms indicate the inflammation to be seated on the convex or superior part, but when the inflammation occupies the concave, or inferior surface

which lies contiguous to the stomach and duode-
-num, there is more sickness and vomiting
and the pain is not so violent in the region
of the liver, as in the other instance.
The symptoms are also modified by the tissue
that is affected whether it be its peritoneal tunic
or in the parenchymatus structure of the organ.
When the peritoneal coat becomes inflamed, the
pain is acute and lancinating, with a
small and corded pulse and a white fur-
-red tongue. If however the parenchyma
only is affected the pain is obtuse and dull;
the pulse is softer and fuller; with a
brown dry tongue. These, however, are not
the only distinctions. When the peritoneal
coat is affected the tenderness not unfre-
-quently extends over the whole abdomen.
It is rarely attended with the yellow tinge
of the eye, and skin, which is an universal

concomitant of inflammation of the parenchyma. The anomalous symptoms are to be ascribed to what are called illusive sympathies. In most cases, however, both tissues become involved, and the symptoms are so conjoined as not to be distinctly recognized.

Causes—Like the other diseases of the class of phlegmasia, it is produced by vicissitudes of weather, by the partial application of cold, or wet when the body is heated, or over fatigued by violent or unaccustomed exertions; by external injuries, such as blows or falls on the region of the liver. Injuries of the head have been known to produce abscesses in the liver. Intense summer heat; long continued intermittent fevers, the vast consumption of inebriating liquors, particularly ardent spirits; and calculi in the hepatic ducts are the most common causes of inflammation of the

liver. To these may be added passions and emotions of the mind. Fear, grief, and the other depressing passions, lessen the secretions of bile, render the skin pale and yellow, and check the perspiration, on the other hand it is well known that anger and rage, increase the biliary secretion, with corresponding effects on the surface of the body.

Diagnosis—There is generally little or no difficulty in recognising the acute form of hepatitis. The only disease it is apt to be confounded with is pneumonic inflammation, yet by accurate observation all doubts will be dissipated. In hepatitis the pain is less acute; the dyspnoea is less oppressive, a gradual inspiration does not augment the pain in hepatitis as it does in pulmonic inflammation, and it is augmented in hepatitis by pressure under the right ribs. The cough attending

pneumonia, is at least coeval with the pain, whereas in inflammation of the liver, the pain always precedes the pulmonary distress.
There are also peculiarities in the symptoms of hepatitis as pain in the right shoulder-blade, yellow colour of the skin and eyes, and the saffron colour of the urine. In the commencement, to distinguish it from gastritis, is not easy, but after the disease has made some progress, the symptoms are better developed, and less obscure. The gastric irritability and sensibility is not so distressing in hepatitis as it is in gastritis and the febrile symptoms in the former, are not accompanied with the low or typhoid tendency attending in the latter.
From spasm of the biliary ducts, occasioned by impacted calculi, hepatitis may readily be distinguished by the strong febrile exite-

ment from the commencement, by the patient preferring to keep his body in a straight quies=cent posture; whereas the greatest possible ease when there is spasm of hepatic ducts, is obtained by bending the body forward on the knees.

Terminations—The acute form of hepatitis like inflammation in other parts of the body may terminate in resolution, suppuration, gangrene, induration, and enlargement, or scirrhus; the termination in gangrene is, however, a rare occurrence. When hepatitis terminates by res=olution it is often attended with some cri=tical evacuation. A solution of the disease is often obtained by a hemorrhage from the nose or hemorrhoidal vessels. Sometimes a bilious diarrhea contributes to the same event, or the disease is cured by the intervention of long continued and profuse

perspiration, by copious secretion of urine, depositing a lateritious sediment, or by an erysipelatous inflammation appearing on different parts of the body.
Nature not relieving herself in either of the ways above mentioned, approaching convalescence may be known by a gradual subsidence of fever and pain, a change of complexion, a return of strength, a tranquil state of the stomach, and a general melioration of condition.
Treatment.— The liver an important and vascular organ, being in a highly phlogosed condition, requires for its relief prompt and decisive measures. All the means for removing inflammation should be resorted to, by strictly observing the antiphlogistic treatment. The lancet here is freely used, being among other remedies the most effectual

Twenty ounces of blood or more should be drawn, says Dr. Chapman, and repeated daily if necessary; in the more vehemant forms, less than this will make no decided and salutary impression on the case, after general bleeding, proportioning the quantity which has been drawn to the age and temperament of the patient and the severity of the case, local bleeding by cups, and leeches, and counter irritants, by blisters, may with great advantage be used. The leeches are usually applied over the part affected. But it is insisted on by some writers that they prove more serviceable when applied around the verge of the anus. This treatment is confirmed by the advantage derived from the hemorrhoidal flux in hepatitis, which, sometimes, occurs as a critical discharge. In conjunction with the lancet, and its auxiliaries, other remedies of importance must

not be overlooked. The liver when in a state of inflammation, has its secretions suspended, or much impeded, and the biliary ducts become congested. Unless says Johnson "we empty the biliary ducts of their viscid and depraved secretions, which are locked up by the general inflammatory state of the organ, we run the risk of abscess, or chronic disorganization of the viscus."

Purges which make an impression on the liver, are here beneficial. Calomel from its specific action on the hepatic apparatus, should be prescribed. It is given in large doses at night, and purged off next morning with some mild article as Epsom salts, or calcined magnesia. Should the disease from extraordinary obstinacy, or defective practice, prove refractory to these remedies, or run on to the chronic stage, then a mercurial course can only be trusted.

In conducting the patient through a salivation in this disease, it will be proper to introduce mercury gradually, and in order to mitigate pain, and subdue febrile action, which will occasionally arise, we shall have to recur, in some instances, to venesection and blisters. Concurring in the general treatment, the diet should be of the lightest and least stimulating kind, consisting of gruel, tapioca, arrow root, and other mild farinaceous articles. On no account should animal food be permitted, either in broths or otherwise. The drinks should consist of the most cooling kind, impregnated with acids, avoiding all heating, and stimulating liquors, with the free admission of cool air in the apartment. Such is the treatment used in acute hepatitis, and if timely and vigorously used, will generally arrest its progress.

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But it occasionally happens that no plan of treatment will succeed, and the disease in defiance of all our endeavours terminates in suppuration. When this process is about to take place, we have as premonitory symptoms, an increase of pain, with a sense of weight and fulness, and an active pulse. The process of suppuration being complete, there is a cessation of pain, or it is dull and throbbing, accompanied with rigors, exacerbations of fever, hectic flushes, and night sweats. Two anomalous symptoms are sometimes met with, one is an inability to sneeze, though the most powerful sternutatories be applied; the other, a loss of motion in the lower extremities, which are in a degree paralized.

The pus may be discharged in various ways. If the abscess point towards the

diaphragm there will be cough and other symptoms of pulmonic distress, and if the abscess burst into the cavity of the chest, the pus may be either expectorated and a cure thus affected, or the patient will die from suffocation. If the portion of the abscess which lies contiguous to the stomach, point towards this viscus, there will be great gastric irritation and if the matter escape into it the patient may be exhausted by vomiting. The discharge may take place into the abdomen and the patient be worn out by hectic fever, or be destroyed by peritoneal inflammation; the abscess may burst into the intestines, or travel through the hepatic duct into the duodenum and the patient recover. In either of the two last cases, the matter is discharged by stool. The abscess frequently points externally

and the matter is either discharged through the skin spontaneously, or may be evacuated by the surgeon. When however, an abscess points externally and becomes somewhat soft with evident formation of pus, it should be evacuated. Cures are often affected where this operation is timely resorted to, but rarely when it is left to break spontaneously. The abscess having dicharged its contents, usually much irritation and considerable debility succeed. To quiet irritation, opiates are proper, and the system is to be supported by mild and nutritious articles of food, and by tonics, especially the nitro-muriatic acid, which often proves of the greatest utility.